

AMENDMENTS TO THE SPECIFICATION:

Page 1, between the title of the application and line 1, insert the following heading:

CROSS-REFERENCE TO RELATED APPLICATIONS

Page 1, before the paragraph commencing “This invention relates to *ad hoc* networking...” insert the following heading and sub-heading:

BACKGROUND

1. Technical Field

Page 1, 2nd full paragraph:

This invention relates to *ad hoc* networking application, in which a number of communications devices co-operate to form a communications network.

2. Related Art

There are two basic types, namely many-to-many communication, wherein the devices communicate with conventional fixed networks through interface or edge devices. The communications devices form nodes of a wireless network, allowing data to be relayed from an originating communications device to a destination communications device, by way of other communications devices. Such devices have a number of applications in circumstances where the communications devices are likely to be moving in unpredictable ways. A particular application scenario is a sensor network, in which data is collected from a network of mobile sensor devices, each of which is capable of taking measurements and relaying packets of data. Such

devices are used by scientists taking measurements of the behaviour of the atmosphere, the sea, ice caps, lava flows or wildlife. The environments in which such devices are required to operate often have measurement points widely dispersed in both space and time. Some of the environments are hostile to human life. In some applications, such as the study of animal behaviour, human intervention could compromise the data. For these reasons the devices must be capable of operating autonomously, and transmitting the data they collect to a more convenient point using a wireless medium such as radio or sound. Moreover it is not usually possible to provide a continuous power supply, so the useful life of a device is primarily constrained by battery life.

Page 5, before the first full paragraph, insert the following heading:

BRIEF SUMMARY

Page 10, prior to the paragraph commencing at line 26, insert the following heading:

BRIEF DESCRIPTION OF THE DRAWINGS

Page 10, paragraph commencing at line 26, and continuing to the top of page 27:

An embodiment of the invention will now be described, by way of example only, with reference to the Figures in which:

Figure 1 is a schematic diagram of a device according to the invention;

Figure 2 is a diagram of part of an *ad hoc* network made up of devices of the kind shown in Figure 1;

Figure 3 is a flow chart showing the processes performed by an individual device, and the information it exchanges with similar devices, in order to determine the current values for the parameters used in the invention; and

Figure 4 is a further flow chart, showing the processes used to identify a destination device and to transmit data to it, using the parameters generated in the process of Figure 3.

DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS

Page 19, line 1:

CLAIMS WHAT IS CLAIMED IS: